Swann MONITORING

DVR4/9-SecuraNet™

USER MANUAL

SW242-4SN / SW242-9SN / SW243-4MB / SW243-9MB

FCC WARNING STATEMENT

This device complies with Part 15 of FCC Rules.
Operation is subject to the following two conditions:
  (1) This device may not cause harmful interference, and
  (2) This device must accept any interference received, including interference that may cause undesired operation

Important Notice

All jurisdictions have specific laws and regulations regarding the use of cameras.   Before using any camera for any purpose, it is the buyer's responsibility to be aware of all applicable laws and regulations that prohibit or limit the use of cameras and to comply with the applicable laws and regulations.   The legality of watching people other than you changes from country to country and even state to state. Contact your local government's privacy information body or your local Police for more information on what if any restrictions you may face.

WARNING: Important notice about correct usage of the power adapter

The correct orientation for the enclosed power adapter is in a vertical or floor mount position.

Precautions and Safety Instructions

Read this manual carefully before using the DVR.   Follow the instructions for proper and safe use of this product.   Keep the instructions in a safe place for future reference.

- Use only the power adapter that is designed and supplied with this product
- Do not use this device near water or other liquids
- Do not use solvents or alcohols to clean the DVR – use a soft cloth only
- Ensure the vents on the sides and back of the DVR are not covered
- Do not use the DVR near heat sources such as heaters, stoves, fireplaces
- If the DVR has been damaged do not attempt to repair it yourself - contact Swann Technical Support for assistance

Maintenance

For safety reasons, disconnect the power adapter before cleaning the DVR.   Solvents and alcohols may damage the casing.   Use only a soft cloth to clean the unit.   If necessary, lightly dampen cloth with water only, for excess dirt and debris.

Contents

1. DVR Features

- **4-Channel:** 4 BNC Camera Inputs - 2 BNC Video Outputs

  9-Channel: 9 BNC Camera Inputs - 1 BNC Video Output

- **4-Channel:** 2 Audio Inputs - 2 Audio Outputs

  9-Channel: 1 Audio input - 1 Audio Output

- View and Operate over Network (Broadband Connection Required)

- NTSC or PAL System

- Motion Detection with Sensitivity and Area Settings

- Timed Schedule, Alarm and Motion Triggered Recording Modes

- Hard Disk Support up to 500GB

- Built-in USB 2.0 Port for Backup to Computer (4CH Model Only) or

  USB Memory Stick Backup (9CH Model Only)

- Supports PTZ Control via RS485 Port

- Remote Control & Removable Hard Drive Tray Included

- VGA Output (Optional)

2. DVR Layout

2.1 Front Panel (All Models)
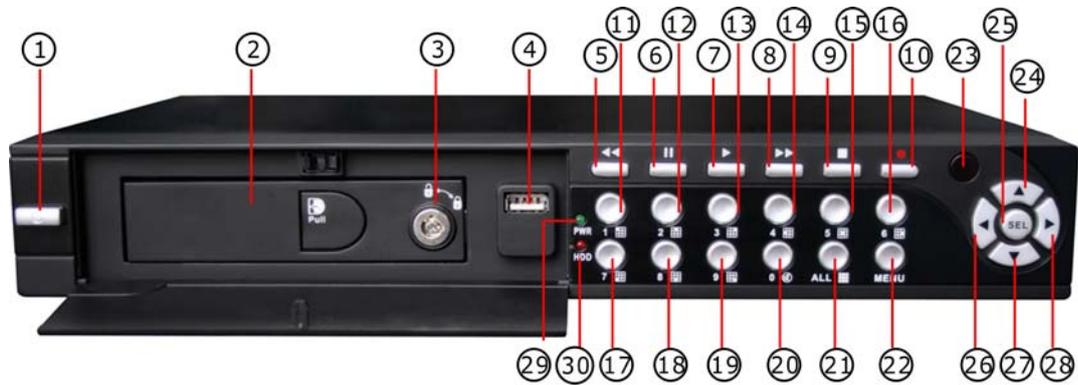
1. Power switch	10. Record	23. IR Receiver
2. Removable HDD Tray	11. CH1	24. Up Arrow
3. HDD Lock	12. CH2	25. Select
4. USB 2.0 Interface	13. CH3	26. Left Arrow
5. Rewind	14. CH4	27. Down Arrow
6. Pause	15-19. CH5-9 (9CH DVR Only)	28. Right Arrow
7. Play	20. Mute Audio	29. Power Indicator
8. Fast Forward	21. Display All Cameras	30. HDD Indicator
9. Stop	22. Menu / Exit Menu	

2.2 Rear Panel
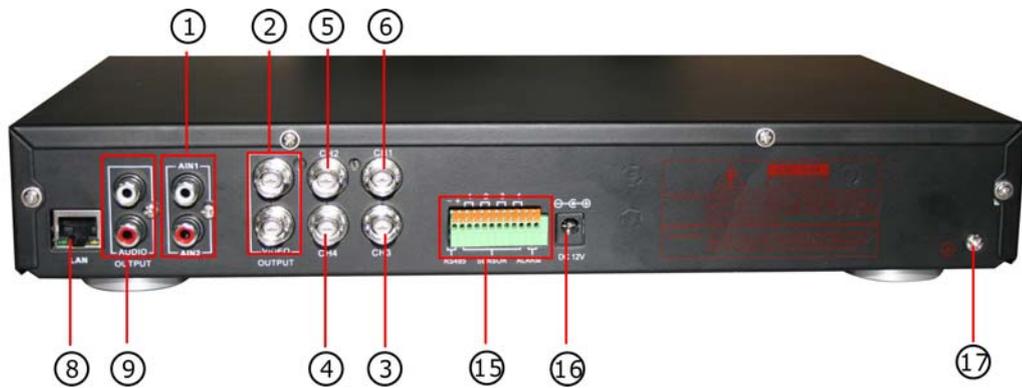
1. Audio Input(s)	7. VGA Output (Optional)	13. CH6
2. Video Output(s)	8. LAN	14. CH5
3. CH4	9. Audio output	15. RS485 / Sensor Input /
4. CH3	10. CH9	Alarm Output
5. CH2	11. CH8	16. DC Power Input Jack
6. CH1	12. CH7	17. Grounding Terminal

2.3 Remote Control

1-9	Channel Select 1-9
0	Number
ALL	Display All Channels
Menu	Enter or Exit Menu
▲	Move Up / Left
▼	Move Down / Right
SEL	Select / Modify Item
◀◀	Rewind
▶	Play Recording
▶▶	Fast Forward
● / ❚❚	Record / Pause
■	Stop Recording / Playback
Audio	Audio Input / Output

3. Hard Drive Installation

WARNING: Do not remove Hard Drive while DVR is running

Ensure HDD jumpers are set to MASTER prior to inserting drive

SW243-4MB / SW243-9MB has a hard drive pre-installed, please skip this step.

3.1 Installing a Fixed SATA Hard Disk
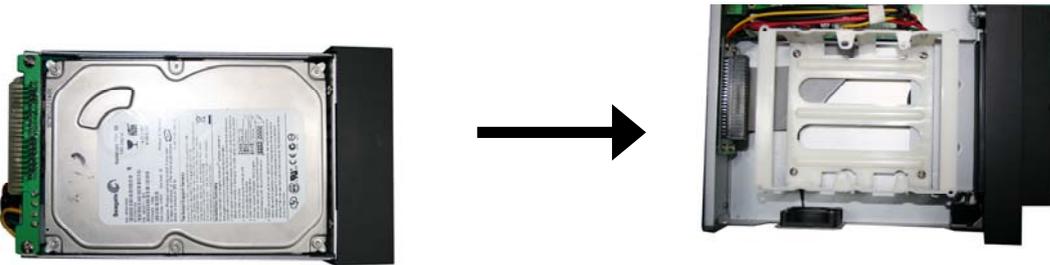
1 - Unlock and remove hard drive drawer from left side of the DVR

2 - Remove hard drive from drawer (if applicable)

3 - Align and connect power and SATA connectors to hard drive drawer

4 - Push the hard drive drawer back into the DVR and lock the drawer

4. DVR Connections

Connect the Yellow RCA
1 plug to a TV's INPUT and
connect the BNC end to
the Video Output on DVR

Connect a VGA cable
5 (not included) from
your monitor to the
VGA port on the
back of the DVR

Optional

Connect the power
4 adapter to the DC 12V
input on the back of
the DVR

Connect one end of the Ethernet
2 cable to the LAN port on the DVR
and the other end to your
router/modem

Connect your cameras to the
3 BNC connectors on the back
of the DVR - 9 Channel DVR
pictured

Optional

Push the front flap to reveal the USB port. Connect the provided USB Cable
or USB Memory Stick.* View footage with the included software on your PC

9 Channel SecuraNet

The 9 channel model uses
a USB Memory Stick to
backup video footage
which can be viewed on
a PC

OR

4 Channel SecuraNet

The 4 channel model uses
the included USB cable to
connect directly to your
computer to backup video
footage

*USB Memory Stick not included

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5. Starting the DVR

5.1 Firmware Version

V1.9

V-EN-BG
2007. 1. 30
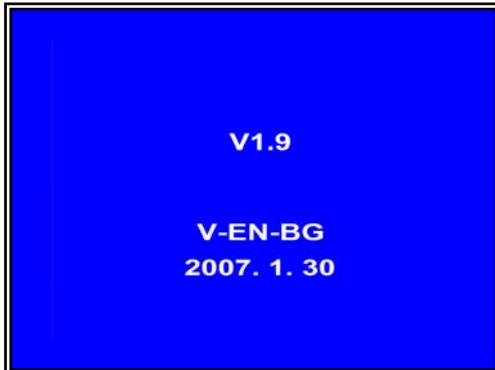
After connecting the power adapter and turn on the power button, the system will boot-up and display the version and released date of the DVR's current firmware.

5.2 Detecting Installed Hard Drive

CHECKING HDD........

MASTER [WDC WD3200AAJB-00T]
SLAVE........
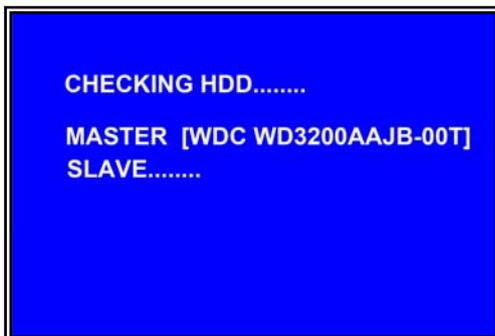
DVR will detect the installed hard drive and display the hard drive information.

5.3 Format Hard Drive

CHECKING HDD......
MASTER [WDC WD3200AAJB-00T]-NEW-
    DVR FORMAT HDD CONFIRM
    (SELECT) FORMAT / (MENU) CANCEL?

When the DVR detects a new hard drive you will be prompted to format the hard drive before using the DVR
    Press [**SEL**] to format or press [**MENU**] to cancel.

6. DVR Menu System

6.1 Navigating the Menus

MAIN MENU

> CAMERA SETUP
RECORD SETUP
RECORD FRAMERATE
VIDEO QUALITY   NORMAL
RECORD SCHEDULE
SENSOR SETUP
HARD DRIVE SETUP
MISCELLANEOUS SETUP
NETWORK SETUP
LANGUAGE   ENGLISH
VIDEO BACKUP
RESET MENU

(◀⬍▶) MOVE   (SEL) SELECT   (MENU) EXIT

[**MENU**]: enters Main Menu

[▲, ▼, ◀ and ▶]: move the cursor

[**SEL**]: select/modify settings

[**MENU**]: press again to exit or return to previous menu.

6.2 Menu Overview

Main Menu
- Camera Setup
- Record Setup
- Record Frame rate
- Video Quality
- Record Schedule
- Sensor Setup
- Hard Drive Setup
- Miscellaneous Setup
  - Change Password
  - Set Time
  - Hidden Channel
  - Audio Port Setup
  - PTZ Setup
  - Auto Record
  - Auto Sequence
  - Keypad Tones
  - Image Parameters
  - Password Control
  - VGA Setup
- Network Setup
- Video Backup
- Reset Menu

6.3 Camera Setup

```
1 > ON              2  ON
        CAMERA SETUP


3  ON               4  ON


(◄♦►) MOVE  (SEL) SELECT  (MENU) EXIT
```

Camera Setup allows you to turn cameras on or off.

Press ▲, ▼, ◄ or ► button to select a channel and then press [**SEL**] to modify the setting **ON** or **OFF**.

Note: If a camera channel is set to off it will not record (*Refer to 6.4 Record Setup*)

6.4 Record Setup

```
1 > ON              2 NOCAM
        RECORD SETUP


3 ON                4 ON


(◄♦►) MOVE  (SEL) SELECT  (MENU) EXIT
```

Record Setup allows you to set up recording channels.

Press ▲, ▼, ◄ or ► button to select a channel, and then press [**SEL**] to modify the setting to **ON** or **OFF**.

If a channel is disabled in Camera Setup, it will not record and the DVR will display "**NOCAM**" on screen.

6.5 Record Frame rate

```
1  3fps             > 2 -
      RECORD FRAMERATE
      TOTAL  31FPS


3  25fps            4  3fps


(◄♦►) MOVE  (SEL) +(■)-  (MENU) EXIT
```

The total frame rate is 50fps (PAL) or 60fps (NTSC). If the sum of the frame rate you select for all cameras is greater than 50fps (PAL) / 60fps (NTSC), the DVR will automatically adjust the largest frame rate value to a smaller value.

Press ▲, ▼, ◄ or ► button to select a channel, and then press [**SEL**] to increase the value or press [■STOP] to reduce the value.

Note: Higher frame rate shows smooth images but requires more hard drive space.

6.6 Video Quality

Video Quality has 4 different settings: **Highest, High, Normal and Low**.

The higher the video setting the better quality images, however higher quality images require more hard drive space.

Press [**SEL**] to change the quality setting.

6.7 Record Schedule

Setting the Record Schedule allows you to customize the type of recording depending on the time of day.

The time line indicates 24 hours of a day based on AM/PM (0 = 12).

Press ▲, ▼, ◄ or ► button to select a time point, press [**SEL**] to modify the recording mode.

NO-RECORD [☐ white]: DVR will not record during this time.

NORMAL-RECORD [🟥 red]: DVR will record continuously.

SENSOR-RECORD [S**]**: DVR will record when sensor or motion is triggered.

NOTE: In order to activate the record schedule press the **[●]** record button when viewing the cameras. After pressing the **[●]** record button if schedule is set to "NORMAL-RECORD" the DVR will start to record immediately; if the schedule is set to be "SENSOR-RECORD" the DVR will not start recording until a motion is detected by the DVR or an installed sensor is triggered.

6.8 Sensor Setup

SENSORED SETUP

> SENSORED RECORD TIME   30
ALARM ON TIME   OFF

H/W SENSOR SETUP
MOTION DETECTOR SETUP

(◀◆▶)MOVE (SEL)SELECT (MENU)EXIT

Sensor Record Time indicates how long the recording time is when the motion or sensor is triggered.

Alarm On Time indicates whether the buzzer will sound when motion is detected.

CONT: Continuous alarm until any key is pressed.
OFF: No alarm

6.9 H/W Sensor Setup

Note: Sensors and extension alarms are not included with the DVR system and may be purchased separately.

H/W SENSOR SETUP

> CHANNEL-1   TYPE:NORMAL-OPEN
CHANNEL-2   NOT INSTALLED
CHANNEL-3   NOT INSTALLED
CHANNEL-4   NOT INSTALLED
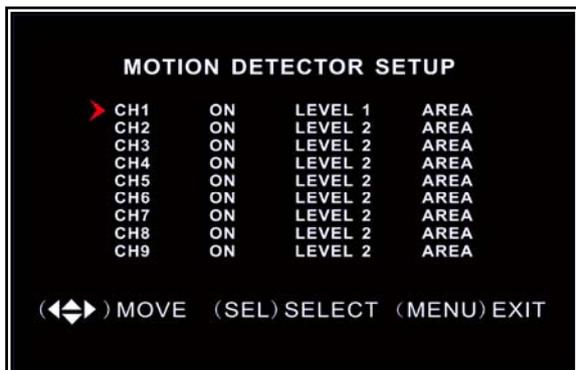
(◀◆▶)MOVE (SEL)SELECT (MENU)EXIT

HARDWARE SENSOR SETUP:

There are 3 different modes for sensor setting: NOT INSTALLED, NORMAL -CLOSE and NORMAL-OPEN. Consult the alarm purchased for more details on which setting is required.

6.10 Motion Detector Setup

This section allows you to set up motion detection options for each camera.

MOTION DETECTOR SETUP

> CH1   ON   LEVEL 1   AREA
CH2   ON   LEVEL 2   AREA
CH3   ON   LEVEL 2   AREA
CH4   ON   LEVEL 2   AREA
CH5   ON   LEVEL 2   AREA
CH6   ON   LEVEL 2   AREA
CH7   ON   LEVEL 2   AREA
CH8   ON   LEVEL 2   AREA
CH9   ON   LEVEL 2   AREA

(◀◆▶)MOVE (SEL)SELECT (MENU)EXIT

MOTION DETECTOR SETUP:
ON/OFF: Enable or disable motion detection recording
LEVEL: Sensitivity of motion detection. There are 3 levels of sensitivity: Level 1-low, 3- highest.
AREA: Select detectable area on the screen.

11
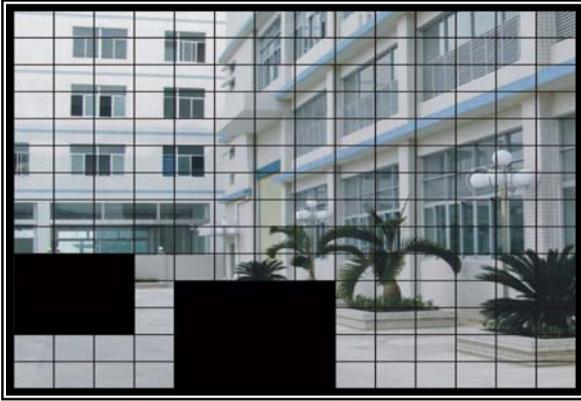
Area Selection:

Press ▲, ▼, ◄ or ► button to select a block, and press [**SEL**] button to set the block to detect motion, The area is detectable when it is clear, the area is not detectable when it is covert by shadow.

6.11 Hard Drive Setup

This section will display the current hard drive status and usage options

OVERWRITE ENABLED:

ON: overwrite oldest video when hard drive is full.

OFF: stop recording when hard drive is full.

HDD SIZE: indicates the total capacity of the hard drive installed in the DVR
HDD USED: indicates the space used in the hard disk drive for recording and the percentage used

**HDD FORMAT:** will erase all video and data on the installed hard drive and make it readable by the DVR
Note: You will be prompted for the password when formatting a hard drive. The default password is "111111"

6.12 Miscellaneous Setup - Change Password
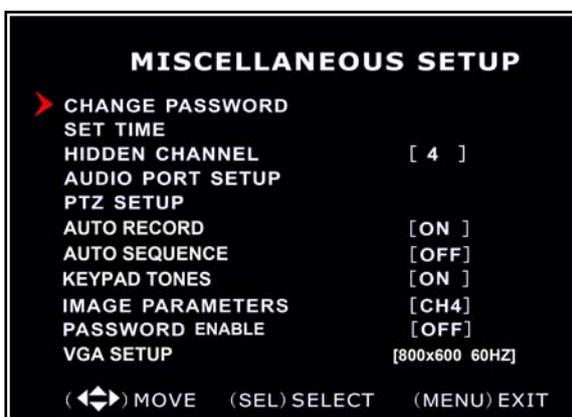
This option allows you to change the system password. The password must be composed with six characters.

All keys can be used as password key **except** the [**MENU**] key, which is used to exit.
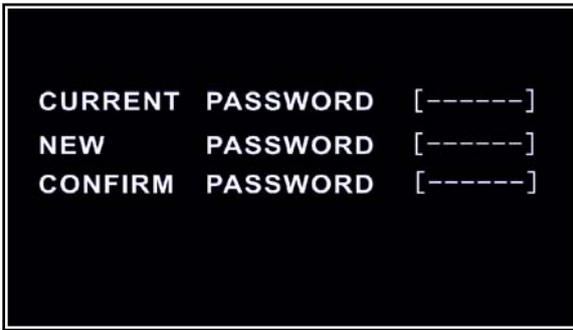
Enter the current password first, and then enter six characters as your new password, repeat the new password to confirm.

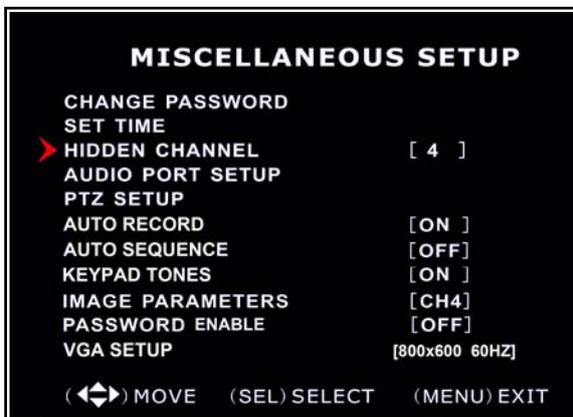If you forget your password, please contact technical support for assistance.

6.13 Miscellaneous Setup - Set Time

The system date and time format is YYYY/MM/DD and HH:MM: SS.

Press ◄ or ► button to select the data to modify, press [**SEL**] to modify. Press [**MENU**] to save and return to previous menu.

6.14 Miscellaneous Setup - Hidden Channel

The system provides a function to hide a channel in monitoring mode. The selected channel can still be recorded while it's hidden; the hidden picture is viewable during playback.

Press [**SEL**] to select a channel to hide.

6.15 Miscellaneous Setup - Audio Port Setup

For 4-channel DVR, there are 2 audio inputs. For 9-channel DVR, there is 1 audio input. You can select the audio recording function to **ON** or **OFF**, and select the video channel that you like to record the audio on.

6.16 Miscellaneous Setup - PTZ Setup

**SPEED:** Set the baud rate (4800，9600，19200，38400) match to your speed dome.

PROTOCOL: Supports "PELCO-D" and "PELCO-P". Select the protocol according to your speed dome's protocol.

CAMERA: select the camera channel which is connected with the speed dome.
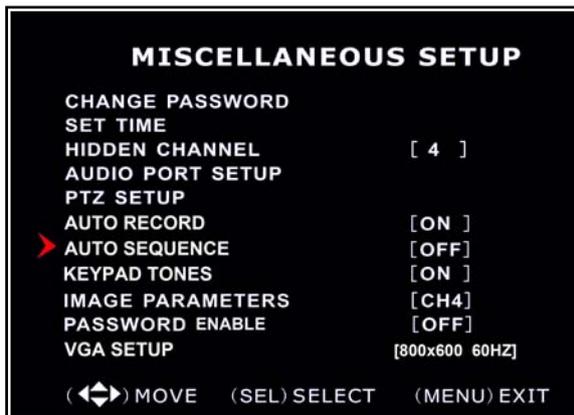
ID: Assign an ID to your speed dome.

Press [**SEL**] to select the camera, press ◄ or ► button to assign the ID.

6.17 Miscellaneous Setup - Auto Record
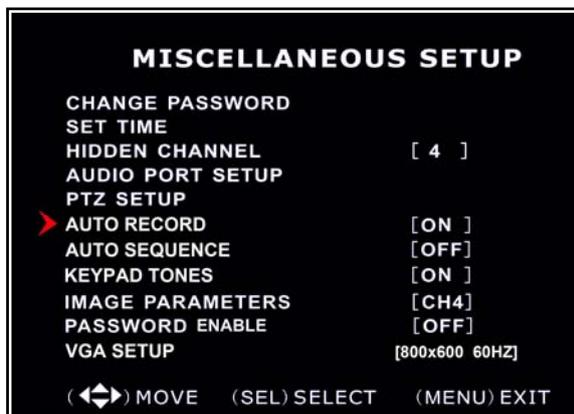
When the function is turned "**ON**", the DVR will automatically begin recording. When you choose "**OFF**", DVR will not record until you press the [●] record button.
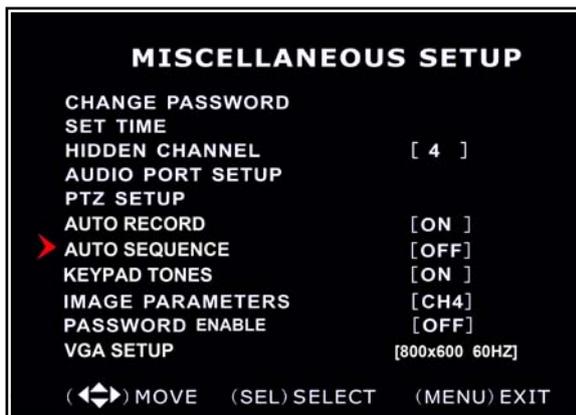
6.18 Miscellaneous Setup - Auto Sequence

```
          MISCELLANEOUS SETUP

    CHANGE PASSWORD
    SET TIME
    HIDDEN CHANNEL              [ 4 ]
    AUDIO PORT SETUP
    PTZ SETUP
    AUTO RECORD                [ON ]
  ▶ AUTO SEQUENCE             [OFF]
    KEYPAD TONES               [ON ]
    IMAGE PARAMETERS           [CH4]
    PASSWORD ENABLE            [OFF]
    VGA SETUP             [800x600 60HZ]

    (◀◆▶) MOVE   (SEL) SELECT   (MENU) EXIT
```

Auto sequence function allows you to view each active video channel in full screen mode and display alternately. Auto Sequence dwelling time can be also adjusted to 1, 2, 5, 10, 15, 30 or 60 seconds, or turn it off by choosing OFF.
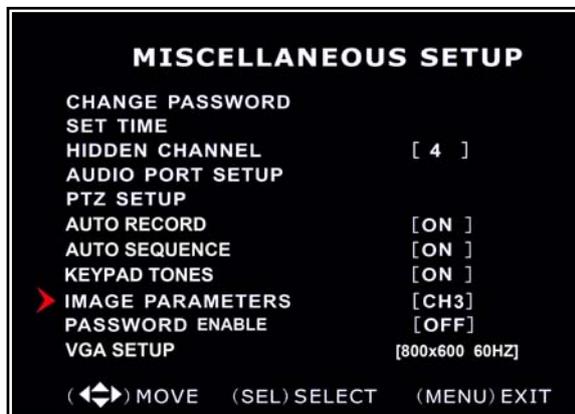
To activate Auto Sequence mode, press [❚❚] button during monitoring or recording mode. To exit auto sequence display, press [**MENU**] or any of channel selection buttons.

6.19 Miscellaneous Setup - Keypad Tones

```
          MISCELLANEOUS SETUP

    CHANGE PASSWORD
    SET TIME
    HIDDEN CHANNEL              [ 4 ]
    AUDIO PORT SETUP
    PTZ SETUP
    AUTO RECORD                [ON ]
  ▶ AUTO SEQUENCE             [OFF]
    KEYPAD TONES               [ON ]
    IMAGE PARAMETERS           [CH4]
    PASSWORD ENABLE            [OFF]
    VGA SETUP             [800x600 60HZ]

    (◀◆▶) MOVE   (SEL) SELECT   (MENU) EXIT
```

This function allows you the mute the buzzer when pressing a button. Press [**SEL**] to select **ON** or **OFF**.

6.20 Miscellaneous Setup - Image Parameters

```
          MISCELLANEOUS SETUP

    CHANGE PASSWORD
    SET TIME
    HIDDEN CHANNEL              [ 4 ]
    AUDIO PORT SETUP
    PTZ SETUP
    AUTO RECORD                [ON ]
    AUTO SEQUENCE              [ON ]
    KEYPAD TONES               [ON ]
  ▶ IMAGE PARAMETERS           [CH3]
    PASSWORD ENABLE            [OFF]
    VGA SETUP             [800x600 60HZ]

    (◀◆▶) MOVE   (SEL) SELECT   (MENU) EXIT
```

You can adjust the image parameters according to your needs.

Move the cursor to this selection and press ◀ or ▶ button to select a channel you want to adjust, then press [**SEL**] button to edit parameters.
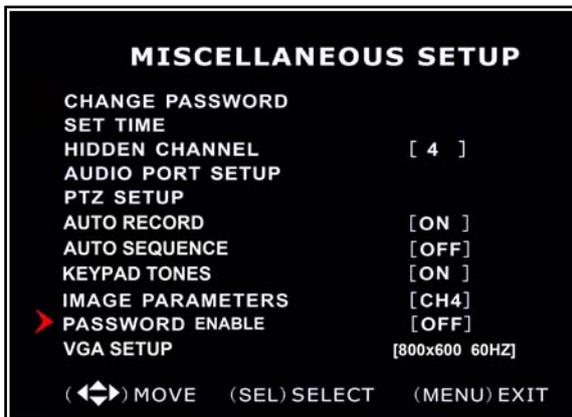
CON: Contrast

BRI: Brightness

HUE: Hue

SAT: Saturation

Press ▲ or ▼ to select the item, and then press [**SEL**] to adjust the value.

6.21 Miscellaneous Setup - Password Enable

The password will be required to control the DVR when this option is set to **"ON"**, and the password is not required when this option is set to **"OFF"**.
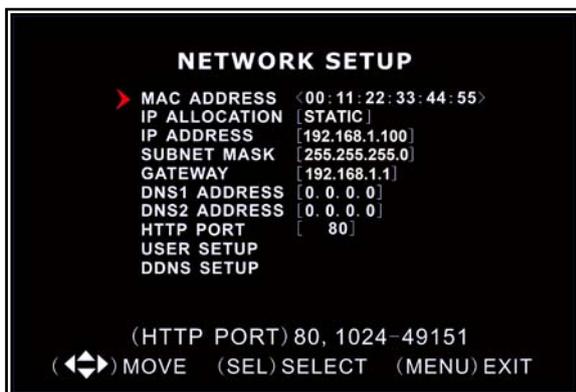
6.22 Miscellaneous Setup - VGA Setup

Select a VGA resolution match to your CRT or LCD monitor.

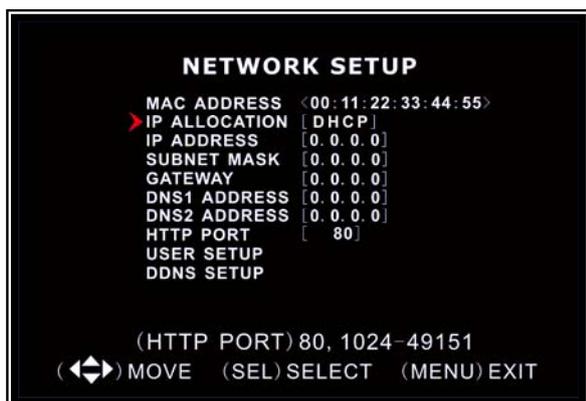**NOTE: VGA video output is an optional function and may not be available on all models**

6.23 Network Setup

Network Setup allows you to prepare the DVR for viewing over the internet or local network.

NETWORK SETUP

MAC ADDRESS ⟨00:11:22:33:44:55⟩
IP ALLOCATION [STATIC]
IP ADDRESS [192.168.1.100]
SUBNET MASK [255.255.255.0]
GATEWAY [192.168.1.1]
DNS1 ADDRESS [0. 0. 0. 0]
DNS2 ADDRESS [0. 0. 0. 0]
HTTP PORT [80]
USER SETUP
DDNS SETUP

(HTTP PORT) 80, 1024-49151
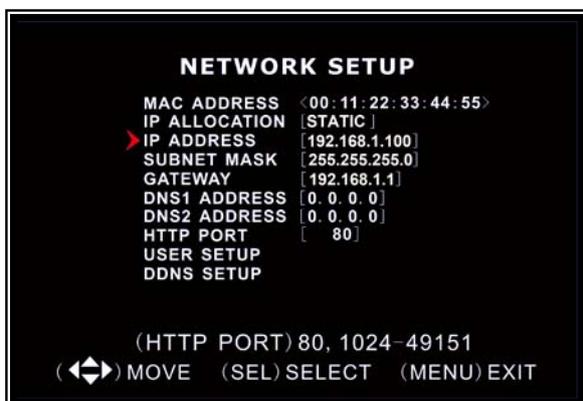(◄♦►) MOVE (SEL) SELECT (MENU) EXIT

MAC ADDRESS: In a local area network(LAN), the MAC (Media Access Control) address is your computer's unique hardware identity code.(On an Ethernet LAN, it is the same as your Ethernet address.) When you are connected to the Internet from your computer (or host as the Internet protocol thinks of it), a corresponding table relates your IP address to your computer's physical (MAC) address on the LAN.

[Important]: This setting should only be changed if multiple DVRs are being setup on the same network.

NETWORK SETUP

MAC ADDRESS ⟨00:11:22:33:44:55⟩
IP ALLOCATION [DHCP]
IP ADDRESS [0. 0. 0. 0]
SUBNET MASK [0. 0. 0. 0]
GATEWAY [0. 0. 0. 0]
DNS1 ADDRESS [0. 0. 0. 0]
DNS2 ADDRESS [0. 0. 0. 0]
HTTP PORT [80]
USER SETUP
DDNS SETUP

(HTTP PORT) 80, 1024-49151
(◄♦►) MOVE (SEL) SELECT (MENU) EXIT

IP ALLOCATION: DVR supports DHCP and Static IP modes. If your modem/router supports DHCP mode use DHCP. When using STATIC mode, you will be required to setup your internet settings manually.

Note: After setting the DVR to DHCP mode restart the unit.

NETWORK SETUP

MAC ADDRESS ⟨00:11:22:33:44:55⟩
IP ALLOCATION [STATIC]
IP ADDRESS [192.168.1.100]
SUBNET MASK [255.255.255.0]
GATEWAY [192.168.1.1]
DNS1 ADDRESS [0. 0. 0. 0]
DNS2 ADDRESS [0. 0. 0. 0]
HTTP PORT [80]
USER SETUP
DDNS SETUP

(HTTP PORT) 80, 1024-49151
(◄♦►) MOVE (SEL) SELECT (MENU) EXIT

IP Address: In a local network, the IP address is a unique designated address for your DVR recognized by your router. Ensure this number is within the range usable by your modem/router. Use the UP "▲"and DOWN "▼" buttons to move the cursor and use the "SELECT" button to change the numbers. Once you have finished the changes restart your DVR.
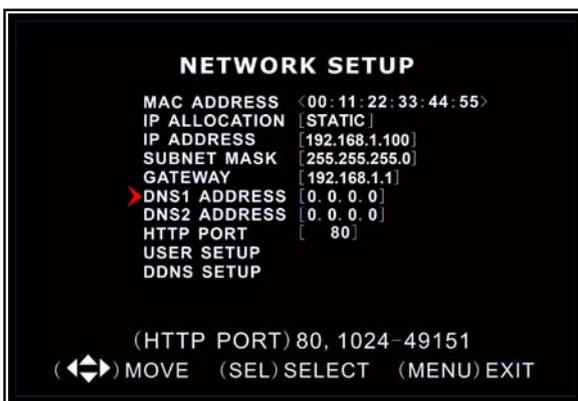
17
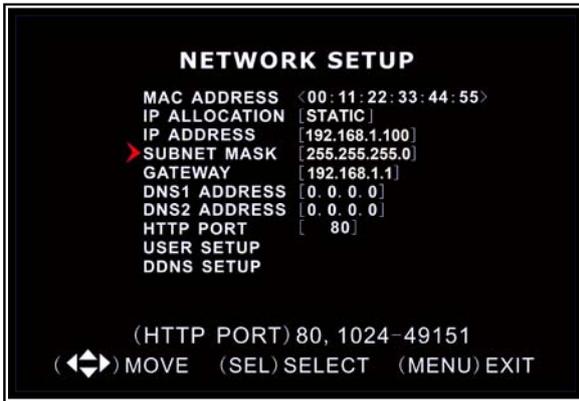
SUBNET MASK: Subnet Mask is used to determine what subnet an IP address belongs to. A number that is used to identify a sub network so that IP addresses can be recognized on a local area network. Consult your modem/router for your LAN's subnet mask.
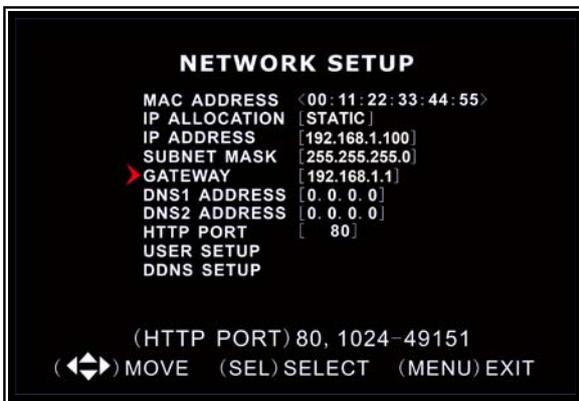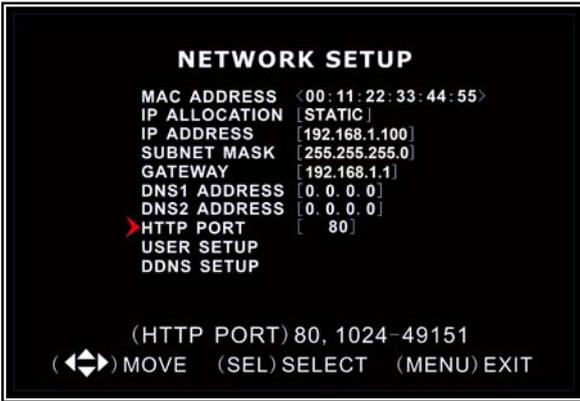

GATEWAY: Set this number to the gateway set by your modem/router.

[NOTE] To adjustment the IP ADDRESS, SUBNET MASK and GATEWAY value, only when the

[STATIC] mode is being selected.

DNS ADDRESS: This code should be provided by your local ISP.

NETWORK SETUP

```
MAC ADDRESS   <00:11:22:33:44:55>
IP ALLOCATION  [STATIC]
IP ADDRESS    [192.168.1.100]
SUBNET MASK   [255.255.255.0]
GATEWAY      [192.168.1.1]
DNS1 ADDRESS  [0.0.0.0]
DNS2 ADDRESS  [0.0.0.0]
> HTTP PORT    [   80]
USER SETUP
DDNS SETUP

(HTTP PORT) 80, 1024~49151
(◄◆►) MOVE   (SEL) SELECT   (MENU) EXIT
```

HTTP PORT: This port number is used to communicate with PC Client. The default value is 80.

USER SETUP

```
> ADMIN ID......  [admin]
ADMIN PASSWD.  [admin]
USER ID.      [ ]
USER PASSWD.   [ ]

(◄◆►) MOVE   (SEL) SELECT   (MENU) EXIT
```

USER SETUP: When accessing the DVR from a remote location you will be prompted for a login and password. The default is "admin" for full administrator rights. Set "User ID" and password to setup a user with limited rights to prevent tampering.

DDNS SETUP

```
> DDNS PROVIDER  [www.DynDNS.com]
DDNS USER NAME  [       ]
DONS PASSWORD  [       ]
DOMAIN NAME   [       ]

(◄◆►) MOVE   (SEL) SELECT   (MENU) EXIT
```

DDNS SETUP : If you require an external service to maintain a dynamic IP address enter the user information here.

LAN-DVR Connection

See the diagram below for steps to connect your DVR to a local area network or the internet. For remote monitoring from your computer, you must have a LAN connection available or broadband Internet access.
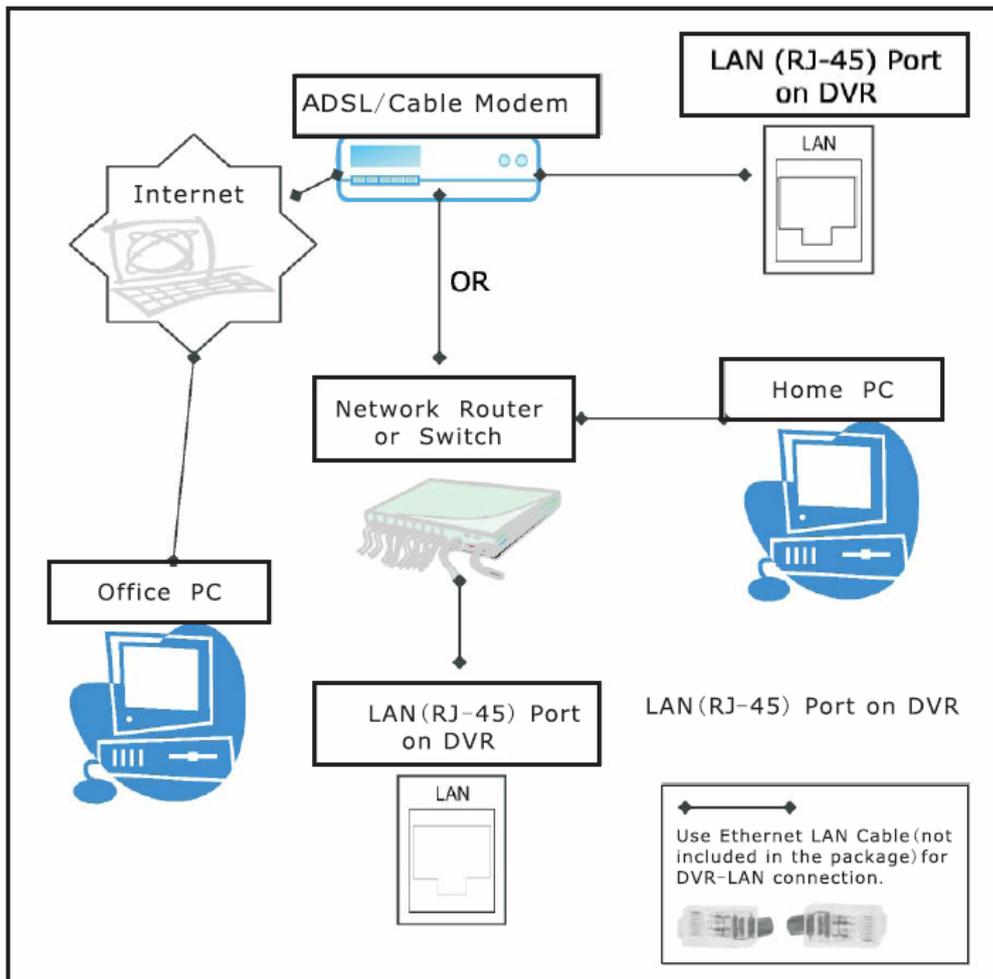
You need to register a www.dyndns.org to get a free account .After registration, you will have a username and password. You can also register your domain name on the website. Please refer to Chapter 5, P. Network Setup for more details. There you will learn how to input the Dyndns username, password, and domain name. You can log in from anywhere by using Internet Explorer and entering your DVR's domain name.

6.24 VIDEO BACK UP (For Optional USB Memory Stick Backup)

This function is only available for the model SW243-9MB / SW242-9SN

which supports USB Memory Stick device. If your DVR is with PC-link USB interface, please refer to this section.

Move the cursor to "**VIEW EVENTS"**, press [**SEL**] to enter event list. Press ▲ or ▼ button to move the cursor, and then press [**SEL**] to select the event you like to backup and return to previous menu.


The DVR system already indicated the starting & ending time of the recording event, move the cursor to "**SIZE"**, DVR will automatically indicate the size of the video you like to backup to USB momory stick.

You can directly select the starting & ending time of a recording video to backup. Move the cursor to "**START"** or "**END**"; press [**SEL**] to enter the interface. Press ◄ or ► button to move the cursor, and then press [**SEL**] to modify the value.
Press [**MENU**] back to previous menu.
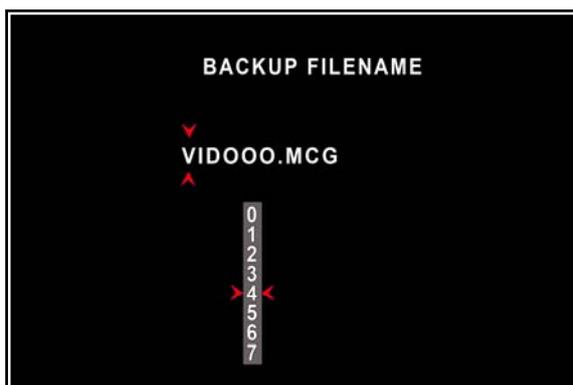
You can rename the backup file. Press ◄ or ► button to select the character you want to modify, press ▲ or ▼ button to select a character from the given character list, and then press [**SEL**] to enter.
Please note that the name must be ended with ".MCG".

Insert your USB memory stick into DVR's USB port.

Move the cursor to "**BACKUP TO USB DEVICE**", press [**SEL**] button. DVR will check your USB device and then start to copy the backup file.

Please read *Chapter 8* about how to play back your recorded video.

6.25 Reset Menu

If you select this item, the system will restore all your settings to factory default values. You need to enter your password to reset the menu.

Chapter 7: Record

7.1 Start Recording

Press [●] record button to start recording according to the record schedule you have set. System will display some information on screen.

[●]: the red dot next to the channel name indicates that the channel is being recorded.

[**A-REC**]: indicates the current record schedule is set to be NORMAL-RECORD mode.

[**S-REC**]: indicates the current record schedule is set to be SENSOR-RECORD mode.

[**N-REC**]: indicates the current record schedule is set to be NO-RECORD mode.

[**39%**]: indicates the percentage of hard disk space used.

7.2 Audio Recording

[🔊]: indicates this video channel is bundled with an audio port, and the audio output is on.

[🔈]: indicates the audio output is off.

[🔊]: indicates the audio is being recorded and the audio output is on.

You could press [0] button on front panel to be mute mode for audio output. The audio input can be still recorded while the output is mute.

7.3 Stop Recording

Press [■] stop button will stop recording. If password protection function is enabled, system will prompt you to input password. Only correct password can stop recording process.

7.4 Estimated Recording Length

Estimated record time based on 160Giga Byte HDD

Standard	Quality	60fps	48fps	32fps	16fps	1fps
NTSC	Highest	62	78	116	232	3720
	High	88	110	165	330	5280
	Normal	107	134	201	401	6420
	Lower	120	150	225	450	7200

Standard	Quality	50fps	36fps	24fps	12fps	1fps
PAL	Highest	64	89	133	267	3200

	High	90	125	188	375	4500
	Normal	110	153	229	458	5500
	Lower	123	171	256	513	6150

Unit: Hour

User also can calculate and estimate record time by below formula

160G Byte @16 frames per second @Normal quality
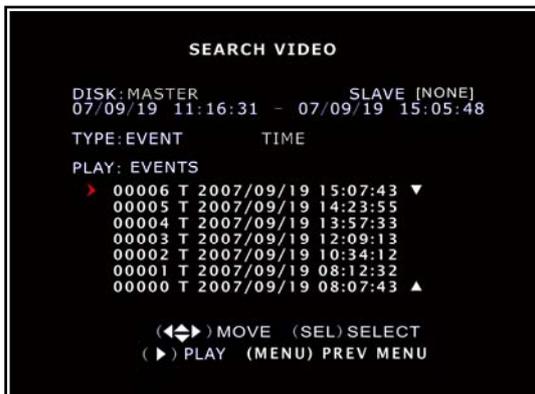
160(Gbyte) × 1024 (Mbyte) × 1024 (Kbyte)

7 (Kbyte/frame) × 16 (frame/sec) × 60(sec) ×60 (min)

Estimate hours is 401 Hours

Chapter 8: Playback

8.1 Playback Control

Press the [▶] PLAY button goes into PLAYBACK mode. The newest record event will be played.

Press the [MENU] button during PLAYBACK mode，then the system will list all the recorded events. The latest record will be on top of the list. Press the ［▲UP］ or [▼DOWN］ buttons to select the start time to

Another way to search video is directly input time period. Press the [MENU] button than use [◄] or [▶] button to select the TIME search mode. Use [**SEL**] button to edit time value, press **"PLAY"** to play the video.
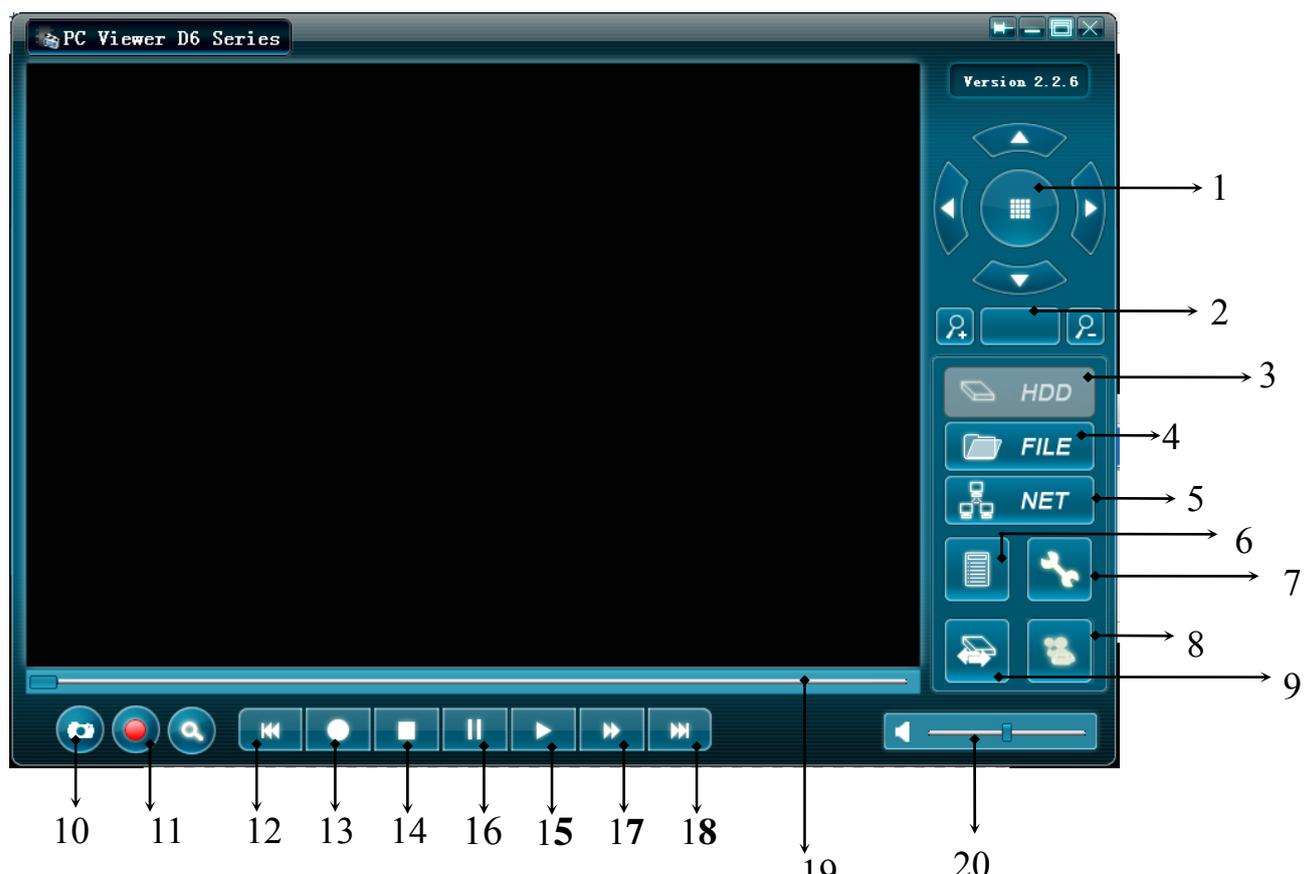
Chapter 9: USB Programming (optional)

9.1 Driver Installation:
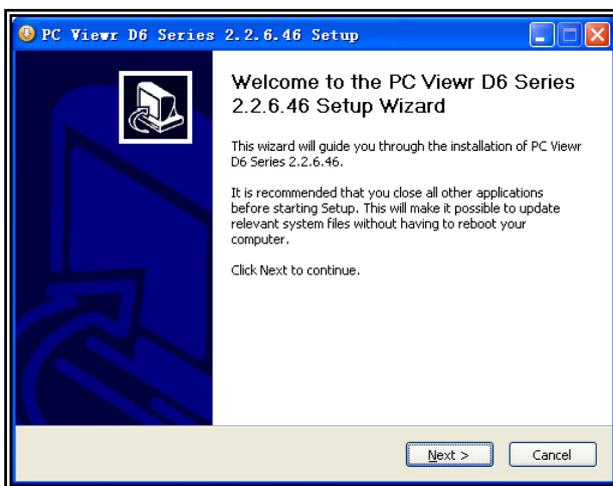
1. Insert driver CD into your CD-ROM Drive.
2. Open CD directory.
3. Double click on the install applications.
4. Run "Install" program.
5. Follow the setup wizard to finish the installation.

9.2 Program Interface

Button functions:

| 1.PTZ Control	11.Convert Streams to AVI file
2.Zoom in，Zoom Out	12.Back one frame
3.HDD Play Mode	13. Record
4.File Play Mode	14.stop
5.Net Play Mode	15.Play
6.Event List	16.pause
7.Control Panel	17.fast forward
8. Remote DVR Control	18.forward one frame
9.Change Storage Device	19.Playback Slider
10.Capture Image	20.Audio Slider

## 9.3 program running

HDD play mode:

System will detect the HDD automatically when you connect the USB cable to your PC (4 Channel Model Only). A USB icon" " will appear in the system tray (right bottom corner of the screen). After you've seen the USB icon, double click " " icon on your desktop to run the program.

 Note: if you do not follow above steps, the program will fail to detect HDD
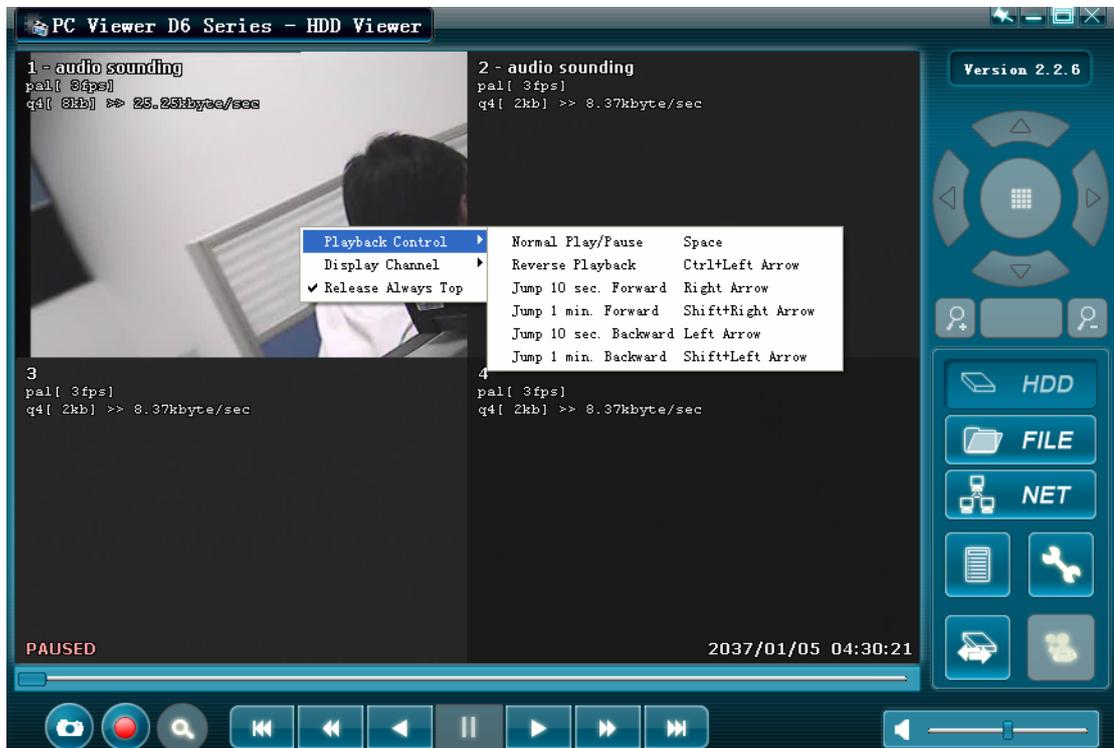
Press to open the video event lists.
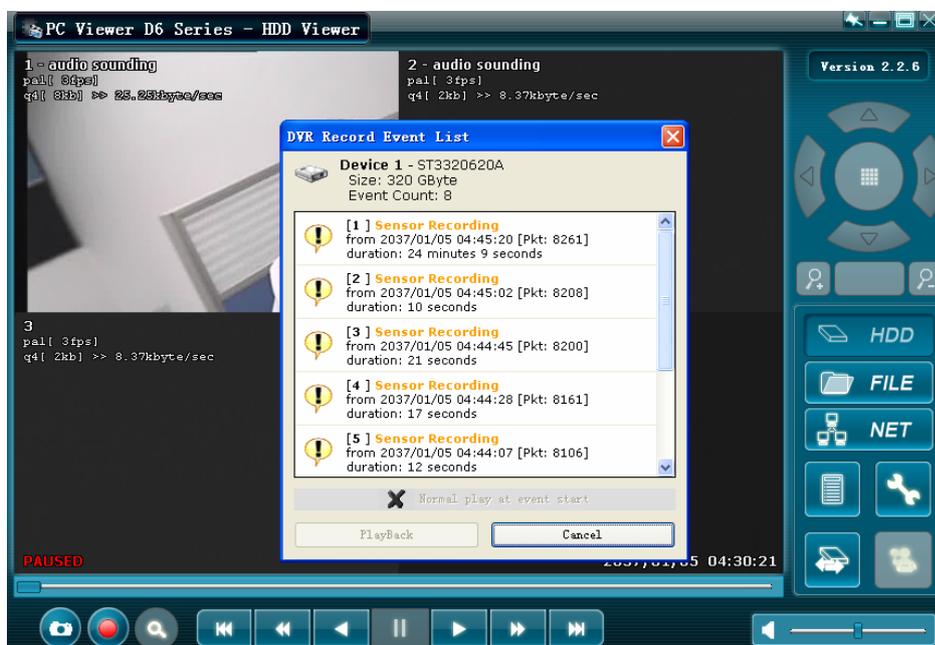
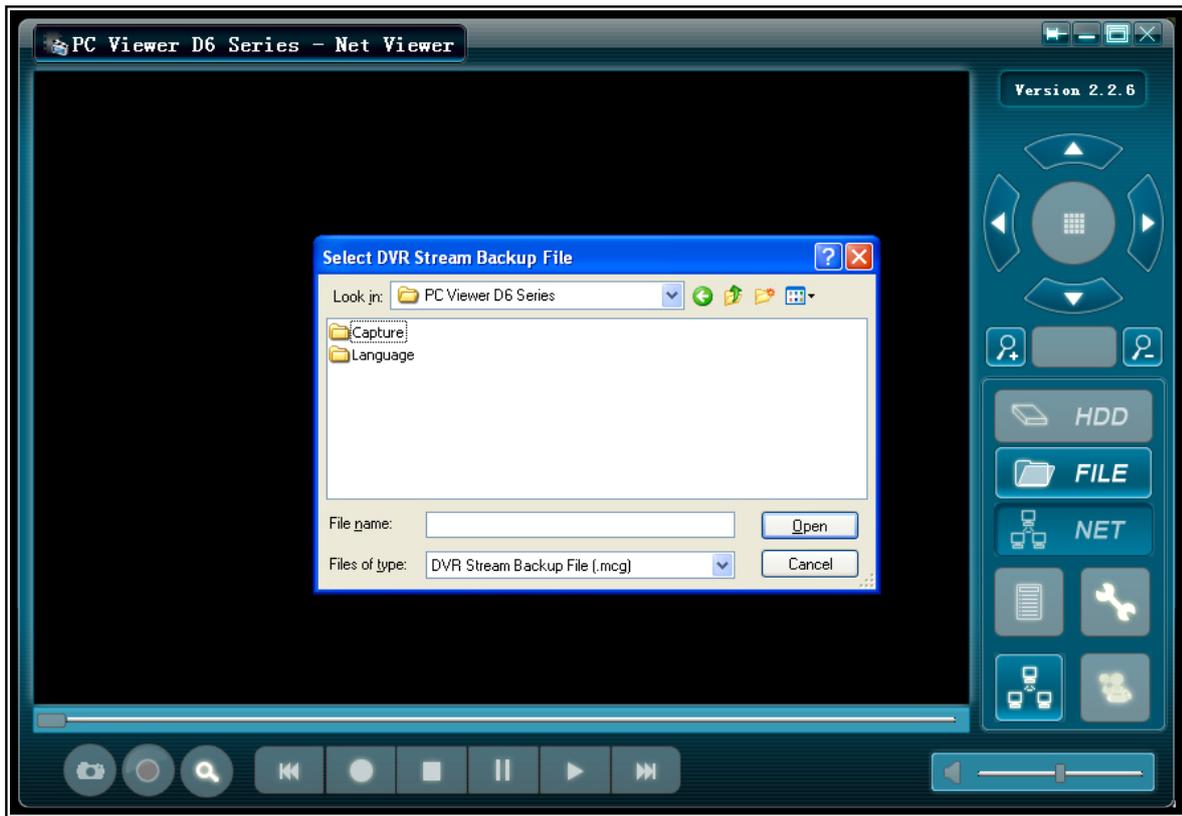Press to **configure the program local settings**
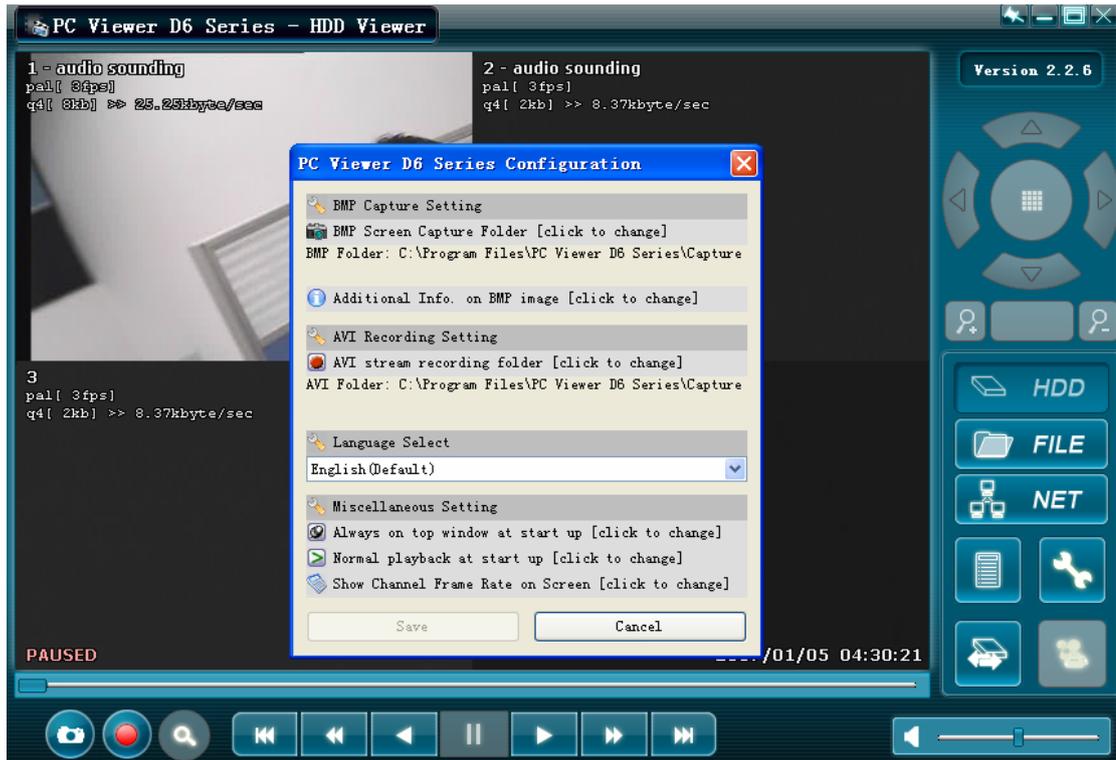
Press to play video.

FILE play mode: only when you plug a USB Memory stick into your PC (9 Channel)

Press "📁 FILE" to open a folder and select the file you want play.
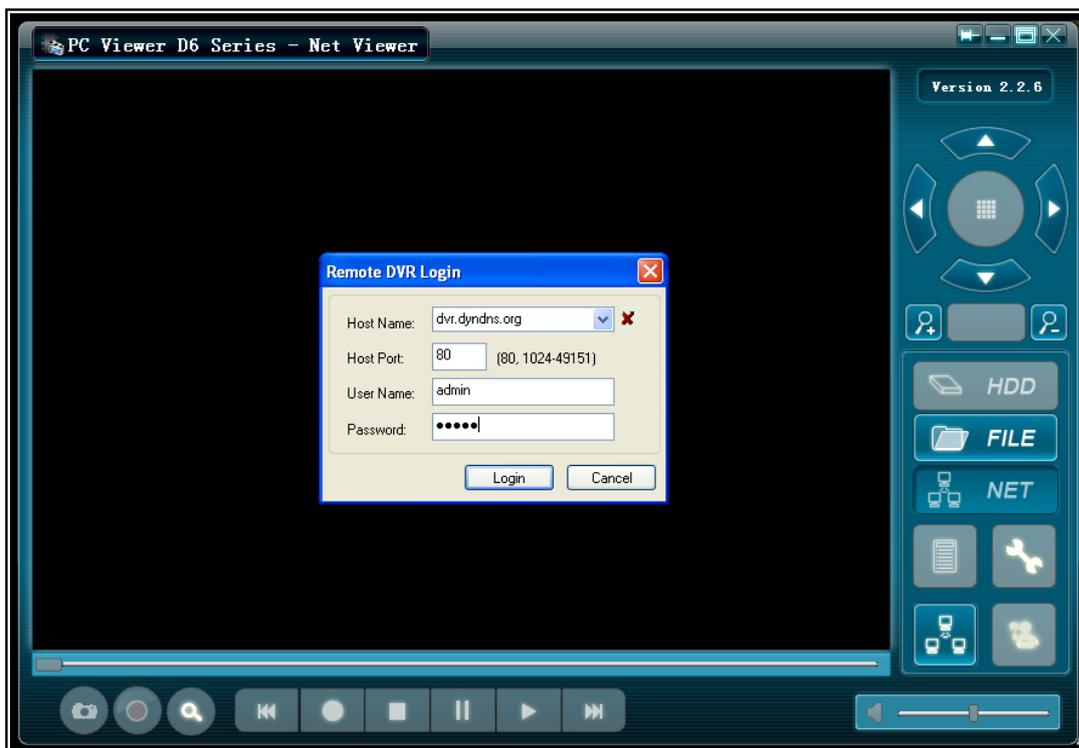
Double click the file.

NET play mode:
This mode allows you remote control you DVR via Internet.

Press "🖧 NET" to popup the login window.

Fill in Host Name, Host Port, User Name and Password.
Press Login.

Chapter 10: Specifications

4 / 9-Channel DVR

Items	Descriptions	
Video Standard	NTSC，PAL	
Video Input/Output	4 Channels/2 Channels，9 Channels/1 Channel	
Audio Input/Output	2 Channels/2 Channels，1 Channel/1 Channel	
Monitoring	Resolution	NTSC:720X480@30fps(Each Ch) PAL:720X576@25fps(Each Ch)
	Features	Full-D1，1-CH/4-CH/9-CH Display
Recording	Resolution	NTSC:720X240@60fps(4/9Ch.Total) PAL:720X288@50fps(4/9Ch.Total)
	Features	Variable Frame Rate/Variable QL per Channel
	Quality	4-Level(Highest High Normal low)
Audio	ADPCM2 CODEC	
Video	MPEG4	
Motion Detection	Settable Window/Level	
Microprocessor	32-bit RISC Processor	
Network Interface	TCP/IP(RJ45)	
Network Monitor	IE(Internet Explorer)	
PTZ Interface	RS485	
USB Interface	USB2.0	
VGA Output	Optional	
Remote control	IR remote control	
Power supply	DC 12V/3A	

Chapter 11: Appendix

11.1 System connection diagram

Sensor

Alarm

PC (optional)

Camera

DVR

LAN (RJ-45) Port on DVR

USB

TV or Monitor

VCR
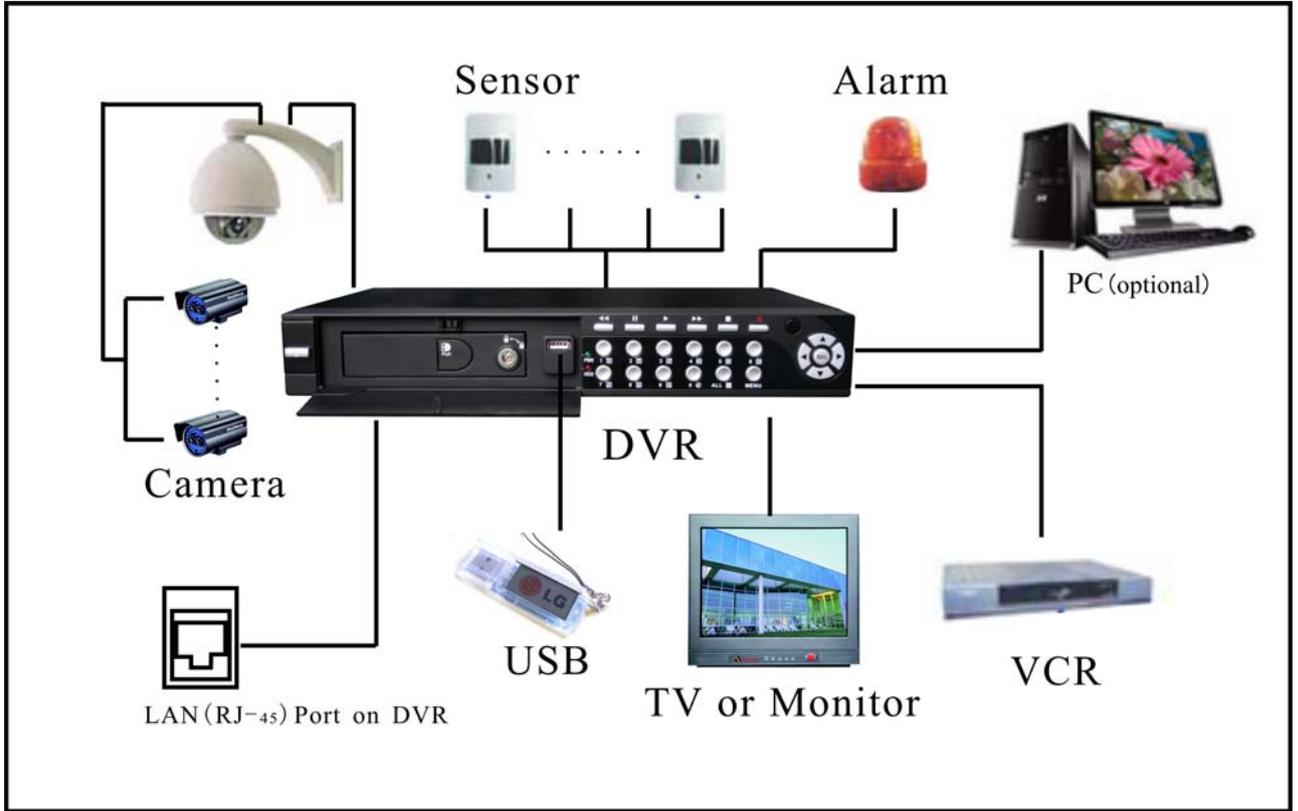
11.2 Accessories

Power Cord

The design of the plug may be different depends on the country.

Power Adaptor

User Manual

Software CD

Remote Controller

USB Cable (4ch DVR only)

Swann Technical Support

Swann Technical Support is available for any inquiries you may have.

Website: www.swannsecurity.com
USA/Canada: 1-800-627-2799, 1-877-274-3695
Australia: 1300 13 8324
Email: tech@swann.com.au